

STATE of CALIFORNIA
Wireless E9-1-1 Project

WSP W-ALI Matrix

Notes:

1. These two tables list the differences between WSPs in the way they populate the CoS, Unc., Conf. & St. fields and should be used in the development of any GIS interface. Phase I is shown in yellow on sheet one and Phase II in blue on sheet two.
2. All WSPs are delivering PI/II information with the NCAS method and using the E-PAM interface to the ILECs. PSAPs should always receive a latitude and longitude, but the initial location fix is usually that of the cell site and is shown in CoS as "W911".
3. Phase I summary: AWS, Cingular/T-Mobile, & VZW provide 100% when delivering cell site. VZW delivers 95% when computing centroid, Sprint PCS always delivers "000" and centroid. Nextel delivers cell site with a "001".

Wireless Service Provider (WSP)	W-ALI Fields That Can Be Different				Location Fix	WSP Air Interface/ Phase I Tech.	Notes
	Class of Service	Uncertainty (meters)	Confidence (percent)	State Name			
AT&T Wireless (AWS)/ Cingular Blue	"W911"	1+	"100%"	"CW"	Phase I (Tower)	TDMA & GSM/ Intrado's I-MPC Phase I	AWS can deliver lat./long. of cell site and provides 100% in the confidence field. AWS still accommodates some analog cell phones. They also use TDMA older technology and the newer GSM digital technology.
T-Mobile (previously Cingular)	"W911"	1+	"100%"	"CW"	Phase I (Tower)	GSM/TCS Phase I	Cingular/T-Mobile shows 100% in confidence field when delivering lat./long. of cell site. Cingular's "Safety Net" solution displays "0" in the uncertainty field and "000" in the confidence field, but this has only been implemented at Torrance, Glendale, and Pasadena and will not be implemented elsewhere.
Metro PCS	"W911"	0	0	"CW"	Phase I (Tower)	CDMA/AGPS/TCS Phase I	Metro PCS does not currently deliver Thomas Brothers map data.
Mountain Cellular						CDMA/AGPS/TCS Phase I	No test result data yet as of 9-9-2004. In Northern CA Markets (Sacramento Deployment Region - El Dorado County)
Sprint PCS	"W911"	1+	"000"	"CW"	Phase I (Centroid)	CDMA/Sprint MPC Phase I	Sprint PCS delivers lat./long of cell sector centroid instead of cell tower site. Sprint PCS confidence displays "000" and computes based on 95%.
Surewest	"W911"				Phase I (Tower)	CDMA/Intrado Phase I?	In Northern CA Markets (Bay Area and Sacramento Deployment Regions)
Verizon Wireless (VZW)	"W911"	1+	"100%"	"CW"	Phase I (Tower)	CDMA/Intrado Phase I	VZW shows 100% in confidence field when delivering lat./long. of cell site.
Verizon Wireless (VZW)	"W911"	1+	"95%"	"CW"	Phase I (Centroid)	CDMA/Intrado Phase I	VZW shows 95% in the confidence field when delivering cell sector centroid fix. This is part of their AFLT solution that provides a slightly more accurate Phase I (cell sector centroid) fix with 95% confidence when the PDE (positioning determining equipment) cannot provide an accurate Phase II lat./long. location upon re-bid.
Nextel	"W911"	"0"	"001"	"CA"	Phase I (Tower)	iDEN/Nextel GMLC Phase I	Nextel's NCAS solution does not currently deliver address of cell site, directional, or Thomas Brother's map ID. They will be upgrading to include this data in 2005. Their confidence value "001" does not have the same meaning as the other WSP solutions and should be ignored.

WSP W-ALI Matrix

Wireless Service Provider (WSP)	W-ALI Fields That Can Be Different				Location Fix	WSP Air Interface/ Phase II Tech.	Notes
	Class of Service	Uncertainty (meters)	Confidence (percent)	State Name			
AT&T Wireless (AWS)/ Cingular Blue	"WPH2"	1+	"067"	"CW"	Phase II	TDMA & GSM/Network Based TDOA	Delivering 67% confidence with display. Both TDMA & GSM use Time-Difference of Arrival by Grayson Wireless.
T-Mobile (previously Cingular)	"WPH2"	1+	"090"	"CW"	Phase II	GSM/Network Based TDOA	Delivering 90% confidence with display. GSM uses Time-Difference-of-Arrival by True Position
Metro PCS	"WPH2"	1+	"095"	"CW"	Phase II	CDMA/Handset Based A-GPS	Delivering 95% confidence with display. CDMA uses Assisted GPS by Snaptrack.
Mountain Cellular					Phase II	CDMA/Handset Based A-GPS	No test result data yet as of 1-28-2005. In Northern CA Markets (Sacramento Deployment Region - El Dorado County). CDMA uses Assisted GPS by Snaptrack.
Sprint PCS	"WPH2"	1+	"000"	"CW"	Phase II	CDMA/Handset Based A-GPS	Computing based on 95% but not currently able to deliver. Zero placeholders are misleading.
Surewest	"WPH2"				Phase II	CDMA/Handset Based A-GPS	No test result data yet as of 1/28/2005. In Northern CA Markets (Mostly Sacramento Deployment Region)
Verizon Wireless (VZW)	"WPH2"	1+	"095"	"CW"	Phase II	CDMA w/o GPS uses AFLT, CDMA with GPS/Handset-Based AGPS	Delivering 95% confidence with display. CDMA uses Assisted GPS by Snaptrack. Phones without GPS chips provide a quasi-Phase II fix using Advanced Forward Link Trilateralization, a type of network triangulation.
Nextel	"WPH2"	1+	"001"	"CA"	Phase II	iDEN/Handset-Based A-GPS	For Phase II data, Nextel delivers "001" which someone at Nextel termed a "K factor." They do not deliver a confidence value, but their uncertainty value is computed with 39.4 % confidence according to Nextel documentation, "Since the measurement is two-dimensional, like lat plus lon, then a 1-sigma error (the Standard Ellipse) would have a Confidence Interval of 39.4%." A-GPS is provided by SIRF.